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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/797,064 | 03/11/2004 | Masamichi Andoh | M1071.1898 | 4702 |
| 32172 | 7590 | 07/05/2005 | EXAMINER | |
| DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP 1177 AVENUE OF THE AMERICAS (6TH AVENUE) 41 ST FL. NEW YORK, NY 10036-2714 | | | HAM, SEUNGSOOK | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2817 | |

DATE MAILED: 07/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/797,064

Applicant(s)

ANDOH ET AL.

Examiner

Seungsook Ham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 3, 4, 8-10 and 14-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5-7 and 11-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>3/11/04, 6/24/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Species I in the reply filed on 5/23/05 is acknowledged.

Claims 3, 4, 8-10 and 14-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Species II-IV, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 5/23/05.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5, 7, 11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Karhu (WO 02/39535).

Karhu (fig. 8) discloses a dielectric resonator device comprising: a cavity 115 (see fig. 1); a dielectric core 802 disposed in the cavity; a support base 804 attached to the dielectric core and the outer shape of the base is larger than a bottom surface of the dielectric core; the support based is fixed on the inner surface of the cavity 813 through support columns 822 such that an air space is located between the dielectric core and the inner surface of the cavity (see also fig. 7, numeral 720). Moreover, the dielectric resonator device forms a dielectric filter or high frequency circuit (fig. 13).

Claims 1, 2, 11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Wey et al. (US '311).

Wey et al. (fig. 2) discloses a dielectric resonator device comprising: a cavity 30; a dielectric core 20 disposed in the cavity; a support base 40 attached to the dielectric core and the outer shape of the base is larger than a bottom surface of the dielectric core; the support based is fixed on the inner surface of the cavity such that an air space/recess is located between the dielectric core and the inner surface of the cavity. Moreover, the dielectric resonator device forms a dielectric filter or high frequency circuit (figs. 11 and 12).

Claims 1 and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Hattori et al. (US '087).

Hattori et al. (fig. 1) discloses a dielectric resonator device comprising: a cavity 2; a dielectric core 1 disposed in the cavity; a support base 3 attached to the dielectric core and the outer shape of the base is larger than a bottom surface of the dielectric core; the support based is fixed on the inner surface of the cavity such that an air space is located between the dielectric core and the inner surface of the cavity. Moreover, the dielectric resonator device forms a dielectric filter, duplexer or high frequency circuit (figs. 33A-36).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karhu (WO 02/39535) or Wey et al. (US '311) in view of Andoh et al. (EP '385).

Karhu and Wey et al. do not show using the resonator device in a duplexer. However, using a dielectric resonator device in a duplexer is well known in the art.

Andoh et al. (fig. 5) discloses a well known dielectric resonator device to form a duplexer by using one of the external coupling unit as a common coupling unit for a dielectric filter.

It would have been obvious to one of ordinary skill in the art to provide one of the external coupling unit of a dielectric filter as a common coupling unit in the filter device of Karhu or Wey et al. to form a duplexer since such design technique is well known in the art, and also it requires only a routine skill in the art.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karhu (WO 02/39535) in view of Wey et al. (US '311).

Karhu does not show the support columns are integrally formed with the inner surface of the cavity.

Wey et al. (fig. 7) discloses a similar dielectric resonator device having a support columns 18 integrally formed with the inner surface of the cavity.

It would have been obvious to one of ordinary skill in the art to form the support columns integral with the inner surface of the cavity in the device of Karhu as an alternative way to fasten the support columns to the inner surface of the cavity as taught by Wey et al.

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Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Accatino et al. and Blair, Jr. et al. discloses a dielectric resonator device having a dielectric core supported by a base such that an air space is located between the dielectric core and the inner surface of the cavity.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seungsook Ham whose telephone number is (571) 272-2405. The examiner can normally be reached on Monday-Thursday, 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571)-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Seungsook Ham
Primary Examiner
Art Unit 2817

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